All-in-one Touchscreen Barebone PC

The Shuttle X50V3 Barebone is an all-in-one PC boasting a 39.6cm (15.6-inch) LCD touchscreen powered by Intel's dual core Atom processor D2700. Intended for use in the home environment, the Shuttle X50V3 Barebone is targeted at hardware experts seeking to build a complete system according to their individual requirements. Most of the hardware is yet built in, just three components need to be installed: memory, hard disk (or SSD) and operating system. Equipped with Intel's integrated graphics, it provides generous performance for daily computing with internet and office applications. An external display can be connected via HDMI or D-Sub. A 2.0MP webcam, built-in speakers, card reader, WLAN and other features leave nothing you could ask for. Have any applications start up quickly by just touching the screen for working most swiftly and conveniently. With the optional accessory PCL69 you can upgrade the device with additional ports: 2x RS232 (serial) and 1x LPT (parallel).

Shuttle All-in-One PC

X50v3 Black Barebone

Touchscreen | Dual Core | Fanless

Images for illustration purposes only.

Feature Highlights

All-in-one Design	• All-in-One PC Barebone platform with resisitive touchscreen • Small: 391 x 327 x 42 mm (WHL) • Stand can also be used as a handle • 100mm VESA mount capable • External, fanless power supply (40W)
Display & Graphics	• 39.6cm (15.6") resistiive touchscreen with 1366x768 resolution • Integrated graphics (GMA3150, DX9) • HDMI + D-Sub/VGA Video output
CPU & Chipset	• CPU: Intel ATOM D2700 Dual Core 2.13 GHz • Chipset: NM10 (Platform Controller Hub)
Storage (not included)	• Supports DDR3-800/1066 (or higher) 2x 204 pin SO-DIMM slots, total max. 4GB • Supports 1x 6,35cm/2,5" SATA hard disk / SSD
Operating System	• Operating system not included • Compatible with Windows 7, 32 Bit
Connectivity	• HDMI, D-Sub, 4x USB, Microphone-in, Line-out • Gigabit LAN, Wireless LAN (n) • Optional: 2x RS232, 1x LPT (PCL69)
Built-in	• 4-in-1 card reader • 2.0 Megapixel webcam • 2x 2W speakers • Electret Condenser Microphone
Power Supply	• 40W, fanless, Energy Star 5 compliant
Warranty	• 24 months Bring-in Service

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Shuttle order number:
PAB-X50V312

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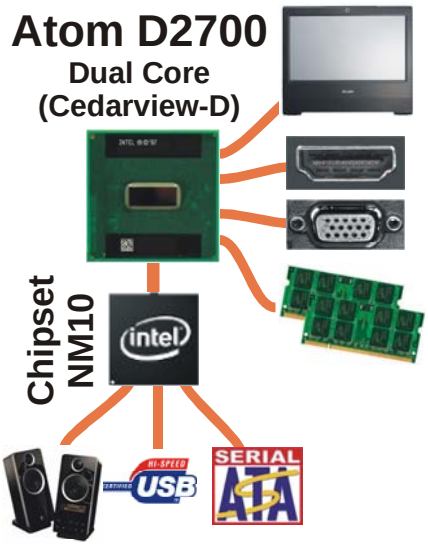
Shuttle X50V3 Barebone - Product Features

All applications at your fingertips

The innovative touchscreen technology delivers the simplest operation possible and makes the screen the centre of action. Its high-quality design lets you control the whole range of multimedia - music, movies, video playback and web browsers start by just touching the screen.

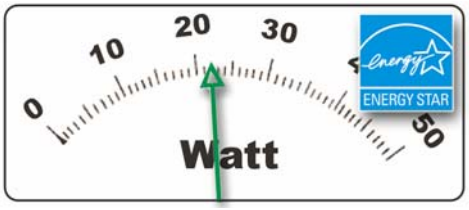


Atom D2700 processor integrates the graphics core

Shuttle X50V3 is equipped with Intel's Atom processor D2700, codenamed Cedarview. It brings both the graphics core with HDMI and D-Sub ports and the memory controller on-die which helps reduce the thermal output and memory latency. The CPU is connected to the Southbridge NM10.

Dual Core. Do more.

Shuttle's all-in-one PC banks on the embedded Intel Atom D2700 Dual Core processor which boosts system productivity, particularly with regards to multi-threaded applications.



Power saving

The new X50V3 version is equipped with an Intel Atom D2700 Dual Core processor and eco-friendly ENERGY STAR 5.0 qualified power adapter that consumes about 20~27 Watt (with 4GB RAM, 500GB hard disk) only.

What does "Barebone" mean?

The Shuttle X50V3 Barebone is targeted at hardware experts seeking to build a complete system according to their individual requirements. Most of the components is yet built in, just the following hardware is required to be installed by the purchaser in this case:

- One 6.35cm/2.5" Serial ATA hard disk or SSD
- One or two DDR3 SO-DIMM memory modules (204 pins)
- Optional: USB keyboard and USB mouse
- Windows 7 (32 Bit) Operating system: Home Premium or Professional

All-in-one PC

Your complete PC system with many components already built in comes in just one single device! This includes the webcam, microphone, mainboard, display, touchscreen input interface, wireless LAN module and speakers. Helps you save on space, looks simply stylish, reduces cable clutter.

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HDMI and D-Sub/VGA Port

The digital HDMI port or the analog D-Sub/VGA port can be used to connect a secondary external LCD display or a beamer to the PC. The integrated graphics unit supports both clone mode and extended mode.

Built-In Webcam and Microphone

The built-in 2.0 mega pixel webcam and microphone makes it easy to take pictures or stream live images from across the internet – and connect in real-time with friends, family, and colleagues.

Slim and chic

Designed as space-savers, this 15.6 inch all-in-one desktop PC only measures 3.6cm in depth.

Fanless - as quiet as 22dBA

The Shuttle X50V3 features a cooling system that combines an integrated heatsink with thermal pads - and removes the fan. As an additional benefit, it's not only quiet but also dust-free.

Carrying handle

Cleverly, the stand can be pulled upwards to serve as a handle making the X50V3 easy to move and carry around.

Kensington Lock

This is a small, metal-reinforced hole as part of an anti-theft system. (The lock and cable are is not included.)

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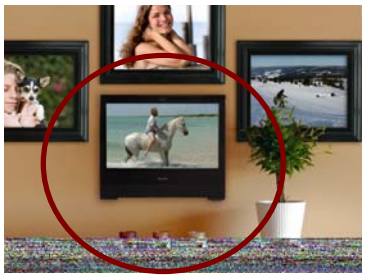
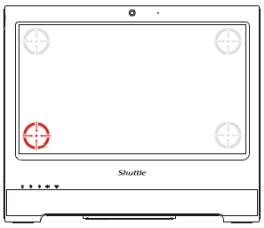


VESA mounting

The stand on the rear can easily be removed to unveil four VESA mounting screw holes that can be used for mounting arms and other mounting devices from a variety of manufacturers.



4 Point Touch Screen Calibration

The X50V3 features a precise touchscreen input device. This can easily be calibrated with the eGalax touch software by just pointing on each corner of the screen using the stylus pen. With this four-point calibration, you can use demanding graphical user interfaces (GUI) that require precise cursor control to properly activate small icons, buttons, scroll bars, etc.

Optional serial and parallel legacy ports

Legacy ports are widely popular among industrial applications. Thus, the X50V3 optionally provides one parallel and two serial ports on the back panel (Accessory PLC69).

Tiny power adapter

The external 40W power adapter is virtually noiseless and can easily be hidden behind the desk thanks to its tiny dimensions.
Dimensions: 89.5 x 37 x 26.5 mm (LWH) = 88ml

24/7 nonstop operation

The Shuttle All-in-One PC X50V3 is officially approved for 24/7 permanent operation. Thanks to its low power consumption and completely passively cooling, this PC runs highly reliable making it perfectly suitable for digital signage and POI/POS applications.

Conditions for permanent use:

- Ambient temperature while under load: 5-35°C
- Air humidity while under load: 10-80% (not condensing)
- Free circulation of air amongst the PC must be guaranteed
- Ventilation holes must be clear
- If a hard disk is installed, this must also be approved for permanent operation by its manufacturer.

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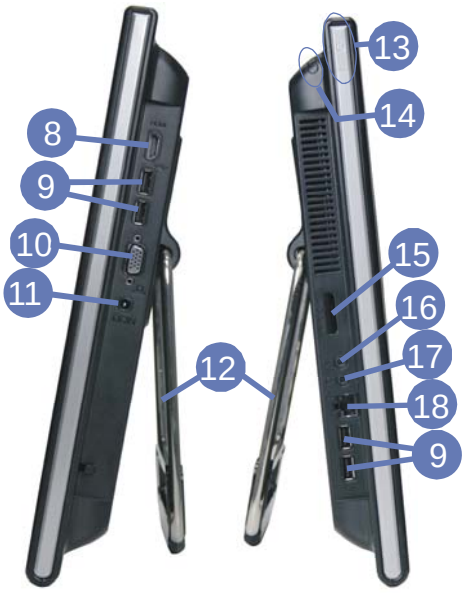
Shuttle X50V3 Barebone Overview (Connectors, buttons, etc.)

1 Touchscreen LCD display
2 Webcam
3 Microphone
4 Power on LED
5 Hard disk LED
6 Wireless LAN LED (Wifi)
7 Stereo speakers
8 HDMI video output
9 4x USB 2.0 connectors
10 D-Sub VGA video output
11 DC-input for power adapter
12 Stand (handle)
13 Power on button
14 Stylus pen with holder
15 Card reader
16 Microphone input
17 Audio line out (head phone)
18 RJ45 Gigabit LAN connector
19 Kensington lock hole
20 Vesa mount
21 2x COM, 1x Par. Ports
(optional accessory PCL69)



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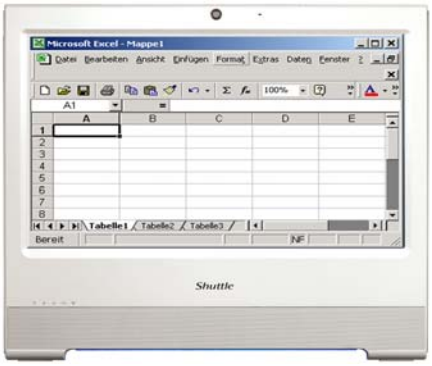
Shuttle X50V3 Barebone – Range of Applications

Entertainment
Music, Movies,
Photo gallery, TV*

*) TV tuner USB stick required



Work
Banking, Shopping,
Office, Stock trading

Control
Surveillance,
Home Automation,
Control device

P.O.S.
Point of sales

Education
In schools, at home,
for children and adults

Communication
Email, VoIP, Messenger,
Blog, Video Conferencing

Digital Signage
Visual advertising,
entertainment, displaying
information in public areas

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Shuttle X50V3 Barebone Black – Specifications

Fanless and silent	Passive cooling, no fan noise at all Perfect to be used in noise-sensitive environments Fanless, dust-free and thus virtually maintenance-free
Chassis	Colour: black, matt / non-glossy Dimensions: 391.3 x 327 x 42 mm (WxHxL) 100mm VESA mount capable Mounting hole for Kensington lock Weight: 2.93 kg net, 4.2 kg gross
Operating system	This system comes without operating system. It is compatible with Windows 7 32 bit version
Touch-screen	Touchscreen function support fingertip input Resistance and single touch technology Including stylus pen for the touchscreen
39.6cm (15.6-inch) display	39.6cm/15.6" LCD display, ratio: 16:9 wide screen panel Resolution: 1366x768 = 1.05 Megapixels Backlight unit: High power LED
Processor	Intel Dual Core Atom processor D2700 (Codename: Cedarview) Intel Hyper-Threading technology: 2-threads per core 32 nm manufacturing process, Micro-FCBGA11 package Intel 64 architecture, Core clock: 2.13 GHz L2 Cache: 1024kB , TDP: max. 10W Supports SSE2, SSE3, SSSE3, Execute Disable Bit Integrated North Bridge with controller for memory and graphics Passive cooling without any fan
Integrated Graphics	The Graphics Processing Unit (GPU) is integrated into the processor Intel GMA 3650, Graphics Base Frequency: 640 MHz, supports DirectX 9 Maximum shared memory: 8MB pre-allocated plus 384MB Video Memory Technology (DVMT) Two video outputs: HDMI v1.3 and D-Sub (VGA) Supports dual display in clone or extended model
Chipset	Intel® NM10 Express Chipset Platform Controller Hub (PCH), Code name: Tiger Point
BIOS	AMI BIOS in a 8Mbit Flash ROM supports PnP, ACPI 2.0 Supports external USB flash memory card boot up Supports Power fail resume / AC power on state / always on / always off Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states Supports Unified Extensible Firmware Interface (UEFI) [1]

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Memory	2x SO-DIMM slots with 204 pins, Single-Channel Supports memory modules with up to 4 GB. Total maximum memory capacity supported: 4 GB (1x 4GB or 2x 2GB) Only unbuffered non-ECC SODIMMs are supported Supports DDR3-800 (PC3-6400) and DDR3-1066 (PC3-8500)

Chip name	Module name	Memory clock	I/O clock	Effective clock
DDR3-800	PC3-6400	100 MHz	400 MHz	800 MHz
DDR3-1066	PC3-8500	133 MHz	533 MHz	1066 MHz
DDR3-1333	PC3-10667	166 MHz	667 MHz	1333 MHz *)
DDR3-1600	PC3-12800	200 MHz	800 MHz	1600 MHz *)

	*) Memory modules that are designed for higher frequencies can also be used. The installed modules then run at an actual effective frequency of 1066 MHz.
Hard disk or SSD	Supports one Serial ATA hard disk (max. 5400 rpm) or one SATA SSD drive in 6.35cm/2.5" format The SATA 2.0 interface supports up to 300MB/s data transfer speed Supports a drive with 9.5mm height (12.5mm is not supported) Supports Unified Extensible Firmware Interface (UEFI) [1]
Card reader	4-in-1 card reader at the front side Supports SDHC, SD, MS und MS-pro memory cards PCIe Interface
Webcam	Integrated Webcam module with 2.0 Megapixel (1600x1200) resolution
Microphone Speakers	Front panel with integrated Electret Condenser Microphone and 2x 2W speakers
Integrated Audio	IDT92HD81 Audio Codec with Azalia support Two analog audio connectors (3.5mm): 1) Line out (head phone) 2) microphone input Digital Audio is supported via the HDMI port.
Wired Network	RJ45 connector supports Gigabit LAN at 10/100/1000 Mbit/sec. Network controller JMC 251 Supports Wake-on-LAN (WOL) from S3, S3, S5 ACPI states
Wireless LAN (Wifi)	Supports IEEE 802.11b/g/n, max. 150Mbps up-/downstream Security: WPA/WPA2(-PSK), WEP 64/128bit, IEEE 802.11x/i Half size Mini-PCIe-Card
Connectors	HDMI 1.3 (supports digital video and digital audio) VGA connector (D-Sub 15 pol., analog) 4x USB 2.0 (2x left side, 2x right side) Network (LAN, RJ45) Audio Line-out (head phone) Microphone input DC input for external power adapter optional: 2x COM, 1xLPT (Accessory: PCL69)

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LEDs and buttons	Power button Power LED (blue) Hard disk LED (orange) Wireless-LAN / Wifi LED (green)
Power adapter	External 40W AC/DC power adapter (fanless) Energy Star 5 compliant AC Input: 100~240V AC, 50~60Hz DC Output: 19V DC, max. 2.1A Dimensions: 27 x 37 x 90 mm DC Connector: 5.5/2.5mm (outer/inner diameter)
Included Accessories	Quick Guide Driver DVD 40W Power Adapter Power cord
Optional Accessories	COM/LPT adapter module PCL69: 1x parallel and 2x serial (RS-232) Carrying bag PF55
24/7 nonstop operation	This device is approved for 24/7 permanent operation. Requirements: - Free circulation of air amongst the PC must be guaranteed. - Ventilation holes must be clear. - If a hard disk is installed, this must also be approved for permanent operation by its manufacturer (max. one hard disk)
Certifi-cations	EMI: CE, FCC, BSMI, C-Tick, CCC Safety: CB, BSMI, ETL Other compliances: RoHS, Eup Lot6
Environment	Operating temperature: 0~35°C Humidity: 10~90%
Conformity	This device is classed as a technical information equipment (ITE) in class B and is intended for use in living room and office. The CE-mark approves the conformity by the EU-guidelines: - EMV-guideline 89/336/EWG electromagnetic tolerance - LVD-guideline 73/23/EWG use of electric devices within certain voltage-limits

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Shuttle X50 Barebone Series – Product Comparison

Model ->	X50	X50V2	X50V2 Plus	X50V3
Lifetime	05/2009 ~ 03/2010	01/2010 ~ 05/2011	04/2011 ~ Q4/2012	Q2/2012 ~ n.a.
Atom Processor	**Atom 330** 1.6 GHz TDP=8W	**Atom D510** 1.66 GHz TDP=15W	**Atom D525** 1.8 GHz TDP=13W	**Atom D2700** 2.13 GHz TDP=10W
BIOS Version	Award	AMI	AMI	AMI
Integr. Graphics	GMA950, DX9	GMA3150, DX9	GMA3150, DX9	GMA3650, DX9
Cooling	With fan	Passive	Passive	Passive
North Bridge	Intel 945GC (22W)	-	-	-
South Bridge	Intel ICH7 (3.3W)	Intel NM10 (2.5W)	Intel NM10 (2.5W)	Intel NM10 (2.5W)
Memory	Max. 2x2GB DDR2-667/533 200 pin SO-DIMMs	Max. 2x2GB DDR2-800/667 200 pin SO-DIMMs	Max. 2x2GB DDR3-800/667 204 pin SO-DIMMs	Max. 2x2 or 1x4GB DDR3-1066/800 204 pin SO-DIMMs
Webcam	1.3 MP	1.3 MP	2.0 MP	2.0 MP
Display Backlight	CCFL	LED	LED	LED
Connectors	D-Sub VGA 5x USB 2.0 RJ45 (Gigabit) 3x Audio	D-Sub VGA 4x USB 2.0 RJ45 (10/100) 2x Audio 2x RS232 1x LPT (parallel)	D-Sub VGA 4x USB 2.0 RJ45 (10/100) 2x Audio	HDMI 1.3 D-Sub VGA 4x USB 2.0 RJ45 (Gigabit) 2x Audio
COM/LPT port	Not available	Included	Optional (PCL68)	Optional (PCL69)
Power consumption (Idle/Full)	39~52W	19~22W	19~22W	20~27W
Power Adapter	65W	40W	40W	40W
Hardware control Webcam, WLAN...	Two buttons	Control AP Software	Control AP Software	BIOS setting
Chassis / Dimensions	Glossy surface 39.13 x 32.7 x 3.6 cm	Glossy surface 39.13 x 32.7 x 3.6 cm	Glossy surface 39.13 x 32.7 x 3.6 cm	Non-Glossy surface 39.13 x 32.7 x 4.2 cm
Back cover with embossed Shuttle-Logo?	Yes	Yes	Yes	No
Light bar at the bottom	Yes	Yes	Yes	No
UPC Barcode	White: 811686007593 Black: 811686002925	COM/LPT enclosed: White: 811686003076 Black: 811686003083 COM/LPT built-in: White: 811686003113 Black: 811686003090	White: 811686003434 Black: 811686003441	White: 811686003885 Black: 811686003878

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